

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-34. (Cancelled).

35. (Currently Amended): A method of obtaining a relatively consistent scattered light measurement, comprising:

moving an accommodation vessel through a light beam via a rotor system;
directing [[a]] the light beam passing through [[an]] the accommodation vessel
toward a detection unit to produce a scattered component and a transmitted component
of the light beam;

cyclically measuring, via a first detector, an intensity of the transmitted
component of the light beam based on a position of the accommodation vessel relative
to the light beam;

cyclically measuring, via second detector, an intensity of the scattered
component of the light beam separately from the transmitted component based on the
position of the accommodation vessel relative to the light beam; [[and]]

adjusting an intensity of the light beam directed through the accommodation
vessel based on the measured intensity of the transmitted component of the light beam;
and

allowing the scattered component of the light beam to pass around a diaphragm
upon which the transmitted component of the light beam impinges.

36. (Cancelled).

37. (Currently Amended) The method of claim 35 [[36]], wherein the intensity of the transmitted component of the light beam is measured by a detector mounted on the diaphragm.

38. (Previously Presented) The method of claim 35, further comprising passing the transmitted component and the scattered component of the light beam through a first lens system.

39. (Previously Presented) The method of claim 35, further comprising passing the scattered component of the light beam through a second lens system.

40. (Previously Presented) The method of claim 35, further comprising separating the transmitted component of the light beam from the scattered component of the optical beam with a shaped diaphragm.

41. (Currently Amended) The method of claim 35 [[36]], wherein the diaphragm includes a region for mounting a detector.

42. (Currently Amended) The method of claim 35 [[36]], wherein the diaphragm includes a region for mounting a beam guidance or deflection unit.

43. (Previously Presented) The method of claim 35, further comprising separating the transmitted component of the light beam from the scattered component of the light beam by a mirror placed in a path of the light beam, a beam guidance or deflection unit mounted on a mounting region of the mirror.

44. (Previously Presented) The method of claim 35, further comprising separating the transmitted component of the light beam from the scattered component of the light beam by a machined lens placed in a path of the light beam, a beam guidance or deflection unit mounted on a mounting region of the lens.

45. (Previously Presented) The method of claim 35, wherein the step of measuring the intensity of the transmitted component of the light beam includes measuring the intensity with a detector having wavelength-selective components.

46. (Currently Amended) The method of claim 35, wherein signals of both the scattered and transmitted components of the light beam are measured temporally both separately and simultaneously.

47. (Previously Presented) The method of claim 35, further including recording a signal of the transmitted component of the light beam as it passes through a vessel for accommodating a material to be measured as a function of a position of the vessel.

48. (Previously Presented) The method of claim 47, wherein the vessel is a cuvette.

49. (Previously Presented) The method of claim 35, further including setting, testing, and if appropriate, correction of the position of a vessel for accommodating a material to be measured, wherein the setting, testing, and correction includes moving the vessel through the light beam; scanning the vessel during its movement through the light beam; and recording a signal of the transmitted component of the light beam as a function of the vessel in order to define the position of the vessel relative to the light beam.

50. (Previously Presented) The method of claim 49, wherein the vessel is a cuvette.

51. (Previously Presented) The method of claim 35, wherein the method is used for in-process control for the purpose of validation in automatic diagnostic analyzers.

52. (Previously Presented) The method of claim 35, wherein the method is used in analysis processes.

53. (Previously Presented) The method of claim 35, wherein the method is used in in-vitro diagnosis processes.

54. (Currently Amended) A method of calibrating a system for measuring a specimen using light, comprising:

directing a measuring light beam toward a detection unit;

passing an empty vessel for accommodating a material to be measured through the path of the measuring light beam via a rotor system;

separating a transmitted component of the measuring light beam from a scattered component of the measuring light beam;

measuring the intensity of a transmitted component of the light beam based on a position of the empty vessel relative to the light beam;

measuring the intensity of a scattered component of the light beam separately from the transmitted component based on the position of the empty vessel relative to the light beam; [[and]]

adjusting an intensity of the light beam based on the measured intensity of the transmitted component of the light beam; and

allowing the scattered component of the light beam to pass around a diaphragm upon which the transmitted component of the light beam impinges.

55. (Previously Presented) The method of claim 54, wherein the method is used in analysis processes.

56. (Previously Presented) The method of claim 54, wherein the method is used in in-vitro diagnosis processes.

57. (Currently Amended) A method of measuring a specimen using light, comprising:

calibrating a measuring system by:

directing a measuring light beam toward a detection unit;

passing an empty vessel for accommodating a material to be measured through the path of the measuring light beam via a rotor system;

separating a transmitted component of the measuring light beam from a scattered component of the measuring light beam;

measuring the intensity of a transmitted component of the light beam based on a position of the empty vessel relative to the light beam;

measuring the intensity of a scattered component of the light beam separately from the transmitted component based on the position of the empty vessel relative to the light beam; [[and]]

adjusting an intensity of the measuring light based on the measured intensity of the transmitted component of the light beam; and

allowing the scattered component of the light beam to pass around a diaphragm upon which the transmitted component of the light beam impinges;

filling the empty vessel with the specimen to be measured;

placing the vessel containing the specimen to be measured in the path of the measuring light beam;

measuring the intensity of a transmitted component of the light beam; and

measuring the intensity of a scattered component of the light beam separately from the transmitted component.

58. (Previously Presented) The method of claim 57, wherein the method is used in analysis processes.

59. (Previously Presented) The method of claim 57, wherein the method is used in in-vitro diagnosis processes.

60. (New) The method of claim 35, wherein the first detector is positioned between the accommodation vessel and the second detector and the diaphragm is positioned between the first detector and the accommodation vessel.

61. (New) The method of claim 54, wherein the first detector is positioned between the empty vessel and the second detector and the diaphragm is positioned between the first detector and the empty vessel.

62. (New) The method of claim 57, wherein the first detector is positioned between the empty vessel and the second detector and the diaphragm is positioned between the first detector and the empty vessel.